

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Andreas Lendlein and Ute Ridder

Serial No.:

10/552,654

Art Unit:

Not Yet Assigned

Filed:

October 7, 2005

Examiner:

Not Yet Assigned

For:

BLENDS WITH SHAPE MEMORY CHARACTERISTICS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicants submit an Information Disclosure Statement, including (3) pages of Form PTO-1449, copies of fifteen (15) documents cited therein, and a copy of the International Search Report mailed July 29, 2004 in PCT/EP2004/003066, which corresponds to the above-identified application.

Pursuant to the waiver in the notice entitled "Information Disclosure Statements May Be Filed Without Copies of U.S. Patents and Published Applications in Patent Applications Filed After June 30, 2003" published on August 5, 2003 in 1273 OG 55, a copy of the cited U.S Patent is not enclosed.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b) prior to a first Office Action on the merits. It is believed that no fee is required with this submission.

Receipt date: 12/08/2005

U.S.S.N.: 10/552,654 Filed: October 7, 2005

INFORMATION DISCLOSURE STATEMENT

However, should a fee be required, the Commissioner is hereby authorized to charge any

required fees to Deposit Account No. 50-3129.

## U.S. Patents

Number 5,446,109 5,506,300	<u>Issue Date</u> 08-29-1995 04-09-1996	Patentee Matsumura, et al. Ward, et al.	Class/Subclass 525/420 525/88
5,665,831	09-09-1997	Neuenschwander, et al.	525/415
6,388,043	05-14-2002	Langer, et al.	528/80

# **Foreign Documents**

Number	Publication Date	Patentee Countr	Y
0 344 912	12-06-1989	Minnesota Mining and	EP
	•	Manufacturing Company	
1 000 958	05-17-2000	Takiron Co. Ltd.	EP
63 179 956	07-23-1988	Asahi Chemical Industry	JP
2 123 129	05-10-1990	Toray Industries	JP
2 239 930	09-21-1990	Toray Industries	JP
2 240 135	09-25-1990	Toray Industries	JP
4 185 772	07-02-1992	Toray Industries	JP
4 342 762	11-30-1992	Mitsubishi Heavy Ind, Ltd	JP.
11 209 595	08-03-1999	Agency IND Science Techn	JP
		Nakayama Kazuo	
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		Foundation	
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		Of Technology	
WO 01/07499	02-01-2001	Elastomedic PTY, Limited	PCT

## Publications

KUSY and WHITLEY, "Thermal characterization of shape memory polymer blends for biomedical implantations", *Thermochimica Acta*, 243(2):253-263 (1994).

NEUENSCHWANDER, et al., "Cell and tissue-compatible implant materials/synthesis", Transactions of the Annual Meeting of the Society for Biomaterials, 2:403, (1996).

OHKI, et al., "Mechanical and shape memory behavior of composites with shape memory polymer", Composites: Part A, 35(9):1065-1073 (2004).

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10552654 - GAU: 1796 Receipt date: 12/08/2005

U.S.S.N.; 10/552,654 Filed: October 7, 2005

INFORMATION DISCLOSURE STATEMENT

### Remarks

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, Applicants invite the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicants are of the opinion that their claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,

Patrea L. Pabst Reg! No. 31,284

Dated: December 5, 2005

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STATEMENT  SEC 0 8 7005 (use as many st	N DISCLOSURE BY APPLICANT eets as necessary)	Application Number	10/552,654
	,	Filing Date	October 7, 2005
<b>&amp;</b> /		First Named Inventor	LENDLEIN Andreas
MADEMARKER		Group Art Unit	
		Examiner Name	
		Examiner Name	

				U.S. PATENT DOCU	MENTS	
Examiner Initials*	Cite No.1	US Patent Doc		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
			d Code <sup>2</sup> if known)			
		5,506,300	T	Ward, et al.	04-09-1996	
		5,446,109		Matsumura, et al.	08-29-1995	
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#### FOREIGN PATENT DOCUMENTS Date of Publication of Pages, Columns, Lines, Where Examiner Foreign Patent Document Name of Patentee or Cited Document MM-DD-YYYY Relevant Passages or Relevant Initials\* Applicant of Cited Document Figures Appear Öffice. Number Kind Code (if known) EP 12-06-1989 0 344 912 Minnesota Mining and Manufacturing Company ΈP Takiron Co. Ltd. 1 000 958 07-23-1988 .IP 63 179 956 Asahi Chemical Industry 05-10-1990 ΙP 2 123 129 Toray Industries IP 2 239 930 09-21-1990 Toray Industries 2 240 135 Toray Industries 09-25-1990 07-02-1992 Ð 4 185 772 Toray Industries 11-30-1992 .IP 4 342 762 Mitsubishi Heavy Ind, Ltd .IP 11 209 595 Agency IND Science Techn 08-03-1999 and Nakayama Kazuo

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark, Office, Washington, DC 20231. DO NOT SEXD FEES OR COMPLETED FORMS TO THIS ADDRESS. SENT TO. Assistant Commission for Patent, Washington, DC 20231.

Date Considered

01/07/2009

Examiner's

Signature

/Michael Dollinger/

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Mountain the patent document with every Standard ST. 61 is dissolated. <sup>4</sup> A propriet semplose is an indicated on the document under WIPO Standard ST. 61 is dissolated. <sup>4</sup> A propriet semplose is a indicated on the document under WIPO Standard ST. 61 is dissolated. <sup>4</sup> A propriet semplose is a indicated on the document under WIPO Standard ST. 61 is dissolated. <sup>4</sup> A propriet semplose is a indicated on the document under WIPO Standard ST. 61 is dissolated. <sup>4</sup> A propriet semplose is a indicated on the document under WIPO Standard ST. 61 is dissolated. <sup>4</sup> A propriet semplose is a indicated on the document under WIPO Standard ST. 61 is dissolated. <sup>4</sup> A propriet semplose is a indicated on the document under WIPO Standard ST. 61 is dissolated. <sup>4</sup> A propriet semplose is a indicated on the document under WIPO Standard ST. 61 is dissolated. <sup>4</sup> A propriet semplose is a indicated on the document under WIPO Standard ST. 61 is dissolated. <sup>4</sup> A propriet semplose is a indicated on the document under WIPO Standard ST. 61 is dissolated. <sup>4</sup> A propriet semplose is a indicated on the document under WIPO Standard ST. 61 is dissolated in the document under WIPO Standard ST. 61 is dissolated in the document under WIPO Standard ST. 61 is dissolated in the document under WIPO Standard ST. 61 is dissolated in the document under WIPO Standard ST. 61 is dissolated in the document under WIPO Standard ST. 61 is dissolated in the document under WIPO Standard ST. 61 is dissolated in the document under WIPO Standard ST. 61 is dissolated in the document under WIPO Standard ST. 61 is dissolated in the document under WIPO Standard ST. 61 is dissolated in the document under WIPO Standard ST. 61 is dissolated in the docume Translation is attached

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U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	US Pater	nt Docume	nt	Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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		PCT	WO 99/42147		Massachusetts Institute Of Technology	08-26-1999		
	_	PCT	WO 01/07499		Elastomedic PTY, Limited	02-01-2001		

Examiner's /Michael Dollinger/ Date Considered 01/07/2009	·			
signature	Examiner's Signature	/Michael Dollinger/	Date Considered	01/07/2009

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<sup>&</sup>lt;sup>1</sup> Unique callion designation number <sup>2</sup> See attached Kiefs of U.S. Platen Documents. <sup>2</sup> Einte Office that issued the document, by the Nov-letter code (NIPO Standard ST 3). <sup>2</sup> For Japanese platent document, by the day of the year of the region of the Emperor many protocols the setted inclination. <sup>2</sup> Not of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>3</sup> Applicant to place a check mark here if English language Translation is attached.

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PADBA		Examiner Name	
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<sup>&</sup>lt;sup>1</sup> Unique Caltion designation number <sup>2</sup> Sea attached Kinds of U.S. Patent Documents. <sup>2</sup> Eate Office that issued the document, by the Aucited code (MIPP O Standard ST 3.) <sup>2</sup> For Japanese aplant documents, by the document <sup>2</sup> Kind of document by the appropriate symbols as indicated on the document under WIPD Standard ST. 16 if possible. <sup>4</sup> Applicant to place a check mark here if English language Translation is attention.